Protein A Agarose

Cat. No. COP12 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Protein A consists of a single polypeptide chain which contains five highly homologous antibody-binding domains. The binding site is located on the Fc region of immunoglobulin. So Protein A Agarose binds specifically to the Fc region of IgG molecules. As a result of this property, Protein A Agarose has been used to pull down antibody: antigen complexes in immunoprecipitation experiments. This Protein A Agarose is prepared by covalently coupling purified Protein A to 4% crosslinked agarose beads by a cyanogen bromide method. Immobilization of protein A agrose can be used to isolate IgG fractions from crude serum, ascites fluid or hybridoma upernatants.
Ligand ensity	approximately 6 mg Protein A per ml of drained gel.
Dynamic Binding Capacity	approximately 30-40mg rabbit IgG per ml of drained gel (calculated as the amount of rabbit IgG adsorbed to the gel before flow exceeded 1% of the absorbance of the ingoing solution at 30 cm/hour and a 0.92 mg/ml sample concentration).
Bead Structure	4 % cross-linked agarose.
Bead Size Range	45 to 165 µm.
Mean Bead Size	approximately 90µm.
Maximum Linear Flow Rate	>300 cm/hour.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Maximum Operating Backpressure	0.3 MPa (3 bar).
pH Stability	2 to 11(short term). 3 to 10(long term).
Physical stability	Negligible volume variation due to changes in pH or ionic strength.
Sanitization	Sanitize column using 70% ethanol.
Formulation	Provided as a aqueous suspension of Protein A Agarose in 20% ethanol/phosphate buffer saline containing 0.08% sodium azide.
Storage	Store refrigerated at 4-8°C. DO NOT FREEZE. Products are stable for a minimum of 1 year from date of receipt when stored at 4-8°C. Non-sterile.
Ship Conditions	Ship ambient temperature, do not freeze, refrigerate upon arrival.
General Procedure	a.Wash the beads with 5 - 10 column volumes of distilled water to remove the storage solution.b.Equilibrate the column with 5 - 10 column volumes of the wash/binding buffer. Once the column is equilibrated, the sample containing the immunoglobulin for purification is applied.c.Wash with the binding buffer until OD280 reaches baseline level. d.Elution of the pure immunoglobulin: Elution is usually achieved at reduced pH. Depending on the sample it may be necessary to decrease pH below 3.0. Most immunoglobulins are eluted in glycine (100 mM) or citric acid buffer (100 mM) at pH 3.0. e.Once the sample has been eluted, wash the affinity matrix with 2 CV of elution buffer. Re-equilibrate the column with at least 10 CV of 1X Wash/Binding Buffer.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA